

LYUDMIRSKIY, I.L. (Moskva)

Work starts in the morning. Zdor v'e 8 no.4:5 Ap 1982. LIT A 15:1
(EDUCATION OF ADULTS)

LYUDMIRSKIY, I. L.

Category : USSR/Radiophysics - Application of radiophysical methods

I-12

' Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 2053

Author : Breytbart, A.Ya., Lyudmirskiy, I.L., Preobrazhenskiy, B.I.

Title : Investigation of Radio-Broadcast Interference produced by Television Sets

Orig Pub : Tekhnika televideniya (M-vo radiotekhn. prom-sti SSSR), 1954, No 1, 3-67

Abstract : It is established from preliminary measurements that the interference in the antenna of a broadcast receiver is produced principally by electric induction, and that the principal sources of noise are the horizontal sweep system and the output circuit of the video amplifier. The mechanism by which the interference acts on the input of the broadcast receiver is explained. The theoretical analysis is used to establish that to calculate the noise-signal level at the receiver input it is necessary to know the coupling capacitance between the interfering element of the television set and the antenna of the receiver. A simple equation, suitable for engineering computation, is derived to determine this capacity. The so-called primary and secondary interference sources are studied. Primary sources are the horizontal transformer, the horizontal-sweep generator tubes, the deflecting system, the wiring, the output circuit of the video amplifier, and the screen of the tube. Secondary sources are the graphite coating of the tube, the vertical sweep generator, and the supply line. A table is given for the noise level and for the coefficients of

Card : 1/2

Category : USSR/Radiophysics - Application of radiophysical methods

I-12

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2053

harmonics from various elements of the KVN-40 television set. Recommendations are made concerning noise suppression, involving the shielding of the primary and secondary noise sources, isolation of the secondary sources with filters, and using a balanced circuit for the connection of the deflecting horizontal coil. Comparative noise measurements are made with shielded and unshielded KVN-49, and T-2 "Leningrad" television sets. The noise level is reduced up to 60 db by using the shielding measures.

Card : 2/2

USSR/Electronics - Television

FD-2294

Card 1/1 Pub 90-7/12

Author : Breytbart, A. Ya., ~~Lyudmirskiy, I. L.~~, and Preobrazhenskiy, B. I..
Active Members of VNORiE

Title : Sources of Noise in Television Sets and Shielding Devices for Them

Periodical : Radiotekhnika 10, 61-69, Jan 1955

Abstract : Article examines the sources of noise in television sets, listing and discussing them, studies the mechanism of the action of this noise on radio broadcast receivers, and proposes effective methods to eliminate them, including shielding, protection with filters, and a compensation circuit. Diagrams, graphs.

Institution: All-Union Scientific and Technical Society of Radio Engineering and Electric Communications imeni A. S. Popov (VNORiE)

Submitted : July 7, 1953

112-57-8-17767

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 8, p 272 (USSR)

AUTHOR: Lyudmirskiy, I. L.

TITLE: On the Theory of the Output Horizontal Transformer (K teorii vykhodnogo strochnogo transformatora)

PERIODICAL: Tr. Televiz. fil.-labor. M-vo radiotekhn. prom-sti SSSR (Transactions of the Television Branch Laboratory. Ministry of the Radio-Engineering Industry, USSR), 1956, Nr 1, pp 19-44

ABSTRACT: The output horizontal-sweep tube operates, during the forward horizontal swing, as a "key" which connects, at definite moments, a DC voltage source with an inductive load comprising the horizontal transformer and the deflection coils. The maximum amplitude of the deflecting current is secured by a definite number of turns of the deflecting coils and of the horizontal transformer primary. Sweep linearity and the necessary high-voltage supply to the kinescope are secured by the selection of the damper tap and by the high-voltage winding. To obtain maximum ampere-turns, steps should be taken to cut the horizontal-transformer leakage inductance, i. e., an autotransformer circuit should be used, and the

Card 1/2

112-57-8-17767

On the Theory of the Output Horizontal Transformer

anode winding should have a layer-by-layer winding instead of a "universal" one. Using ferrocart for transformer cores permits decreasing the number of turns, i.e., decreasing the leakage inductance. The formulae and the results presented help to select the output tube and give a few hints for calculating the turn number and designing the horizontal transformer.

V. F. A.

Card 2/2

112-57-8-17744

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 8,
p 269 (USSR)

AUTHOR: Breytbart, A. Ya., and Lyubarskiy, I. L.

TITLE: Determination of Harmonic Signal Levels Causing Noise at the Inputs
of Various Receivers (Opredeleniye urovney garmonicheskogo signala,
sozdayushchikh pomekhu na vkhode priyemnikov raznykh klassov)

PERIODICAL: Tr. Televiz. filialov M-vo radiotekhn. prom-sti SSSR
(Transactions of the Television Branch Laboratory. Ministry of the
Radio-Engineering Industry, USSR), 1956, Nr 1, pp 64-68

ABSTRACT: The minimum level of an extraneous signal that causes interference
to radio-broadcast reception depends on the nature of transmission, on
the value of antenna EMF due to a desirable station, on the difference
between useful and interfering-signal frequencies, and on the frequency
response of the receiver. Nominal noise levels are defined for various
classes of receivers on the basis of GOST for radio-broadcast receivers.
An experimental determination of noise levels at the input of various
receivers at 170 and 200 kc, as well as experimentation methods, are
described.

V. F. A

Doc. 1

LJUDMIRSKIJ, I. L.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1329
 AUTHOR BREJTbart, A.JA., LJUDMIRSKIJ, I.L.
 TITLE On the Computation of the Reciprocal Capacities between Bodies
 of Small Dimensions.
 PERIODICAL Žurn. techn. fis, 26, fasc. 5, 1094-1105 (1956)
 Issued: 6 / 1956 reviewed: 9 / 1956

The here derived formulae make it possible to compute the disturbance levels of television sets and other sources with sufficient accuracy, as also to compute the parasitic couplings which may occur in some nodes of radio receiving- or transmitting sets. The here derived expressions, in spite of several simplifications, do not deviate by more than + 30% from experimental data. At first the reciprocal capacity of two metal bodies in free space is dealt with. For the coupling capacity $C_{\text{coupl}} = C_1 C_2 / R$ is found. Here C_1 and C_2 may be considered as self-capacities of the corresponding bodies with respect to the earth. Coupling capacity in consideration of the chassis: The influence exercised by the chassis is determined here only approximatively because of the great difficulty of accurate computation. Coupling capacity is smaller than in free space if a chassis (of a television- or radio-set) exists. Consideration of the influence exercised by small foreign bodies on coupling capacity: The influence exercised by a third body which is small as against the spacing between the other two bodies, and which is sufficiently far from the other two bodies, is computed. It causes a reduction of the reciprocal

Žurn.techn.fis, 26, fasc. 5, 1094-1105 (1956) CARD 2 / 2 PA - 1329
 capacity of the other bodies. This reduction increases with an increasing third capacity (i.e. the larger the third body is) and with diminishing distance to the third body.

There follows the discussion of the influence exercised by round holes on the permeability of a screen. The electric lines of force penetrating through the holes cause a residual coupling capacity, and in some cases it is rather easy to determine this capacity. This is done here for the special case of round holes, but deliberations may be extended also to holes of other shapes. If some lateral walls exist near the source an infinite number of mirror images are to be introduced. If the shape of the holes does not deviate considerably from the shape of a circle, an "effective radius" can be used. The thickness of the screen may be taken into account by a certain reduction of the effective radius.

Experimental verification of the formulae found: When investigating the main disturbances of radio connections by television it was found that, with a screened line transformer, the graphite covering of the electron beam tubes is one of the principal sources of disturbance. Agreement between the relative theoretical and experimental data concerning coupling capacity is quite satisfactory, but agreement of absolute values is sometimes less good.

INSTITUTION:

SAMOYLOV, Vladimir Fedorovich; LYUDMIRSKIY, I.L., retsenzent; BREYTBART,
A.Ya., otv.red.; BASHCHUK, V.I., red.; SHEFER, G.I., tekhn.red.

[Saw-tooth wave generators in television; theory and calculation
principles] Generatory pilsobraznogo toka v televizore; osnovy
teorii i rascheta. Moskva, Gos.izd-vo lit-ry po voprosam sviâzi
i radio, 1960. 154 p. (MIRA 13:11)
(Oscillators, Electric) (Television)

ZAYTSEV, I. S.; LYUDMIRSKIY, I. M.

Dividing chuck used in milling. Mashinostroenie no.5:109
S-0 '62. (MIRA 16:1)

(Chucks)

ZAYTSEV, I. S.; LYUDMIRSKIY, I. M.

Center-extension piece for screw-cutting machines. Mashino-
stroenie no.5:109-110 S-0 '62.

(MIRA 16:1)

(Screw-cutting machines—Attachments)

M L LYUDMIRSKIY and N D MALYUTINA

"Measurement of the Vacuum-Factor of Receiver-Amplifier Tubes"
from Annotations of Works Completed in 1955 at the State Union Sci. Res. Inst.
Min. of Radio Engineering Ind.

So: B-3,080,964

M I LYUDMIRSKIY, V P RACHENKO

"Development of a Procedure for Determining the Reliability of
Operation of Receiver-Amplifier Tubes in **Television Receivers** by Obtaining and
Analyzing statistical Materials" from Annotations of Works Completed in 1955
at the State Union Sci. Res. Inst; Min. of Radio Engineering Ind.

ARONOVICH, V.V. (Moskva); ANISIMOV, I.A. (Moskva); LYUDMIRSKIY, M.I.
(Moskva); PATUSHINSKAYA, R.S. (Moskva)

Quality control of some processes in the chemical industries.
Avtom.1 telem. 21 no.6:821-832 Je '60. (MIRA 13:7)
(Automatic control) (Chemical engineering)

LYUDMIRSKIY, M.I.

Concentrate the efforts on the basic trend of automation.
Bum.prom. 37 no.10:4-6 0 '62. (MIRA 15:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut
kompleksnoy avtomatizatsii.
(Automation)
(Woodpulp industry—Equipment and supplies)

L 31127-65 EWT(d)/EWT(1)/EEC(k)-2/EEC-1/EEC-2/EEC(h) Po-4/Pq-4/Pg-4/Pe-4/Pk-4/Pl-4

ACCESSION NR: AP5007162

S/0286/65/000/003/0035/0035

AUTHOR: Lyudmirskiy, V. I.; Lomize, L. G.; Kallagov, V. N.

TITLE: A method for measuring time-variable phase shifts in the shf range. Class 21, No. 167909 49
B

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 3, 1965, 35

TOPIC TAGS: phase shift, phase meter, electronic measuring device

ABSTRACT: This Author's Certificate introduces a method for measuring time-variable phase shifts in the shf range. The method is based on homodyne frequency conversion using shf oscillator modulation, a signal delay line in one of the channels and a mixer. In order to measure rapid phase shifts in the shf range, single-tone frequency modulation of the shf oscillator is used. Two harmonics of the modulation frequency, separately amplified and converted, are used at the output of the shf mixer. When these harmonics are combined, they give an intermediate frequency signal which contains the phase shift being measured.

ASSOCIATION: none

Card 1/2

L 31127-65

ACCESSION NR: AP5007162

SUBMITTED: 26Ju163

ENCL: 00

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

Card 2/2

L 7791-66 EWT(1)/EEC(k)-2/EWA(h)
ACCESSION NR: AP5027623

UR/0109/65/010/011/2010/2020
621.396.622.029.64.001.24

AUTHOR: Andreyev, V. K.; Lomize, L. G.; Lyudmirskiy, V. I.; Filipchikov, L. L.

TITLE: Calculation of frequency conversion in high-speed serrodyne shf phasemeters with delay lines

SOURCE: Radiotekhnika i elektronika, v. 10, no. 11, 1965, 2010-2020

TOPIC TAGS: shf phase meter, *frequency conversion*, *circuit delay line*

ABSTRACT: The theory is presented and the formulas are developed for amplitudes and phases in a serrodyne shf phasemeter; the conditions of maximum phase deviation at the mixer input are analyzed; the role of the nonlinear-forward and finite-return motions in serrated modulation is clarified. These conclusions and practical recommendations are offered: 1) The maximum modulation frequency can be determined from $T \geq 5\tau$, where T is the modulation period and τ is the delay time of the long line involved; thus, the maximum speed (or maximum permissible Doppler frequency) is about $0.1/\tau$; the IF corresponds to the 4th or 5th harmonic of the modulation frequency. 2) With the return motion of the modulating voltage, or when the delay time is commensurate with the modulation

Card 1/2

L 7791-66 EWT(1)/EEC(k)-2/EWA(h)

ACCESSION NR: AP5027623

period, the maximum phase deviation is $2\pi n(1 + \beta)$ for operation on the first 2—3 harmonics and is $2\pi n(1 - \beta)$ for operation on higher harmonics, where β is the ratio of the return time to the phase-modulation period; 3) Strict linearity of the modulating voltage and the frequency characteristic of the shf oscillator is not needed; a 20—30% nonlinearity is tolerable. "In conclusion, the authors wish to thank N. I. Malykh and Ye. S. Yampol'skiy for a useful discussion." Orig. art. has: 7 figures and 42 formulas. 2

[03]

ASSOCIATION: none

SUBMITTED: 28Jul64

ENCL: 00

SUB CODE: 09

NO REF SOV: 003

OTHER: 005

ATD PRESS: 4147

Card 2/2

L 10204-66 EWT(1)/EEC(k)-2/FCS(k)/EWA(h) WR

ACC NR: AP5028465

SOURCE CODE: UR/0286/65/000/020/0032/0032

AUTHORS: Lyudmirskiy, V. I.; Lomize, L. G.; Kallagov, V. N.

ORG: none

TITLE: Superhigh frequency range interferometer.²⁵ Class 21, No. 175542
[announced by Radio Engineering Institute AN SSSR (Radio-tekhnicheskiy institut AN SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 32

TOPIC TAGS: interferometer, superhigh frequency

ABSTRACT: This Author Certificate presents a superhigh frequency (SHF) range interferometer containing two channels -- a measuring¹⁰ and a reference, a mixer, and a video amplifier. To increase the noise protection of the device, the SHF oscillator is provided with a monotone frequency modulator (see Fig. 1). A waveguide delay line is used in the measuring channel. A band-pass amplifier selecting one of the harmonics of the modulation frequency is connected at the output of

Card 1/2

UDC: 533.9.082.74:535.411

2

L 10204-66

ACC NR: AP5028465

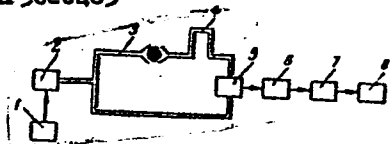


Fig. 1. 1 - Monotone frequency modulator;
2 - oscillator; 3 - measuring channel;
4 - waveguide delay line; 5 - mixer;
6 - intermediate frequency amplifier;
7 - detector; 8 - oscillograph.

the SHF mixer. Orig. art. has: 1 diagram.

SUB CODE: 09/

SUBM DATE: 26Jul63/

Card 2/2

LYUDOGOVSKAYA, L.A. (Moskva, K-104, Bogoslovskiy per. d.16-6 kv. 25);
MORGUNOVA, T.D. (Moskva, D-80, ul. Levitana, d.22, kv.2.)

Adsorbability of specific components of various tumors [with summary
in English]. Vop.onk. 2 no.3:302-308 '56. (MLRA 9:10)

1. Iz otdela virusologii (zav. - deystv. chlen AMN SSSR prof. L.A.
Zil'ber) Instituta epidemiologii i mikrobiologii im. pocheta. akad.
N.F.Gamaleya.

(SARCINA, exper.

M-1, in rats, adsorbability of specific components
by erythrocytes)

(NEOPLASMS, exper.

M-1 sarcoma of rats, adsorbability of specific
components by erythrocytes)

LYUDOGOVSKAYA, L. A., Cand Med Sci -- (diss) "Adsorption on erythrocytes of specific antigens from animal and human tumors." Moscow, 1960. 14 pp; (Academy of Medical Sciences USSR); 250 copies; price not given; (XL, 51-60, 121)

ZIL'BER L.A.; LYUDOGOVSKAYA, L.A.

Adsorption of specific tumor antigens by erythrocytes. Dokl.
Akad. SSSR 134 no.2:489-492 S '60. (MIRA 13:9)

1. Institut epidemiologii i mikrobiologii im. N.F. Gamaleya
Akademii meditsinskikh nauk SSSR. 2. Deystvitel'nyy chlen
AN SSSR (for Zil'ber).

(ERYTHROCYTES) (ANTIGENS AND ANTIBODIES) (CANCER)

AVENIROVA, Z.A. (Moskva, Zhiro, Zhivopisanaya, 28/19, kv. 53);
LYUDOGOVSKAYA, L.A.

Antigen structure of tumors in man. Report no.1: Preparation of
specific sera to human stomach cancer. Vop.onk. 8 no.8:48-51
'62. (MIRA 15:9)

1. Iz otdela immunologii i onkologii Instituta epidemiologii i
mikrobiologii im. Gamalei.
(STOMACH--CANCER) (SERUM) (IMMUNOLOGY)

LYUDOGOVSKAYA, L.A. (Moskva, K-104, Bogoslavskiy per., d.16/6, kv.25)
SHERSHUL'SKAYA, L.V. (Moskva, V-218, Prosyuznaya ul., 35/11,
kv. 193)

Use of the method of adsorption on erythrocytes in the study
of tumor viruses and specific tumor antigens. Vop.onk. 9 no.2:
118-126 '63. (MirA 16:9)

1. Institut eksperimental'noy i klinicheskoy onkologii AMN
SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N.Blochin)
(VIRUS, RESEARCH) (ONCOLOGY, EXPERIMENTAL)
(ANTIGENS AND ANTIBODIES) (ERYTHROCYTES)

TSVETKOV, V.S.; LITVINOVSKAYA, L.P.

Study of the anisotropy of the optical properties of polymers. Report No. 1
Purification of polymers by the method of repeated extraction with organic solvents.
Voprosy khimii i tekhnologii [Problems of Chemistry and Technology] 1977, 1, 1, 1-10.
MIRA 1977, 1, 1, 1-10.

I. Litvinovskaya, L.P., V.S. Tsvetkov, L.P. Litvinovskaya, prof. L.A. Zil'ber
Institut khimii i tekhnologii, ul. Lenina, 13, 119017, Moskva, SSSR.
prof. L.A. Zil'ber, L.P. Litvinovskaya, V.S. Tsvetkov, Moskva, SSSR, Moskva
Snizheniya 13, 119017, Moskva, SSSR, Moskva, SSSR, Moskva, SSSR
Gama 13

LYUDOGOVSKAYA, L.A.; TSVETKOV, V.S.; KIRYUKHIN, V.P.

Antigen structure of tumors in man. Report No.3: Comparative analysis of stomach cancer tissue. Vop. onk. 10 no.3:18-22 '64.
(MIRA 17:8)

1. Iz otdela immunologii i onkologii (zav. - prof. L.A. Zil'ber) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei (dir. - prof. P.A. Vershilova) i patologoanatomicheskogo otdela (zav. - S.V. Kagramanov) 62-y Gorodskoy bol'nitsy (glavnyy vrach - V.D. Margolin). Adres avtorov: Moskva, D-182, Malaya Shchukinskaya 13, Institut epidemiologii i mikrobiologii imeni Gamalei, otdel immunologii i onkologii.

TSVETKOV, V.S.; AVENIROVA, Z.A.; LYUDOGOVSKAYA, L.A.

Antigenic structure of tumors in man. Report no.4: Fractioning of extracts from cancer of the human stomach by the method of preparative electrophoresis. Vop. onk. 10 no.10:64-67 '64.

(MIRA 18:8)

1. Iz laboratorii kletochnykh antigenov (zav. - G.I.Abelev) otdela immunologii i onkologii (zav. - prof. L.A.Zil'ber) Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei (direktor - prof. P.A.Vershilova). Adresy avtorov: Leningrad, Institut onkologii AMN SSSR (for Avenirova); Malaya Shchukinskaya 13, Institut epidemiologii i mikrobiologii im. N.F.Gamalei, Otdel immunologii i onkologii (for Tsvetkov, Lyudogovskaya).

LYUDOGOVSKAYA, V.I.

Simplified method for calculating bed-days. Zdrav.Ros.Feder. 6
no.9:30 S '62. (MIRA 15:10)

1. Iz bol'nitsy v pamyat' 25 Oktyabrya (glavnyy vrach I.P.Yushmanov),
Leningrad.

(HOSPITALS--ADMINISTRATION)

. LYUDOGOVSKAYA, V.S.

Some problems in the daily regimen and physical development of children from the standpoint of modern hygienic positions. Med. zhur.Uzb. no.11:77-81 N '58. (MIRA 13:6)

1. Iz kafedry gigiyeny detey i podrostkov (zav. - prof. V.P. Shirokova-Divayeva) Tashkentskogo gosudarstvennogo meditsinskogo instituta.

(CHILDREN--CARE AND HYGIENE)

LUDOGOVSKIY, G.										PROCESSES AND PROPERTIES INDEX									
Quality of seamless tubes produced from high arsenic steel. G. Lyudogovskiy, <i>Stal</i> 6, No. 8, 1947, No. 10, 1947; <i>Stal</i> 12, 51, 1946; 7, No. 3, 1947. With the exception of impact resistance, for which inconsistent results were obtained, the mech. properties of seamless tubes produced from basic converter steel contg 0.10% As were satisfactory. The tubes can be easily welded. H. W. Rohmann										100 AND 1000 INDEX									
										100 AND 1000 INDEX									
ASB-514 METALLURGICAL LITERATURE CLASSIFICATION										100 AND 1000 INDEX									

PRECISES AND PROPERTIES INDEX																									
Extracting vanadium from Thomas cast iron. G. I. Lyudogorshin and N. S. Sokolov. Russ. 56,105, Nov 30, 1939. Thomas iron contg. V is melted in an acid furnace; the V passes into the slag.																									

Common Element

Metallurgical Literature Classification

CH

PROCESSES AND PROPERTIES

Natural Cr-Ni-Fe alloys. E. V. Kochnev and G. I. Lyudskovskii. *Russ. 50,952*, April 30, 1949. P-contin. materials, such as phosphoric, or apatite, are incorporated into the blast-furnace charge to facilitate blowing of the product in the basic converter.

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

9

Addition agent for alloy steel. E. A. Kochnev and
G. I. Lyudugovskii. Russ. 59,016, Feb. 28, 1911. To
produce a lower content of C in the steel, the addition agent
of Fe, Cr and C contains 5-20% of P.

LYUDOGOVSKIY, G. I.

(Methods of obtaining phosphorus fertilizers from raw materials of Kazakhstan. A. B. Bekturev and G. I. Lyudogovskiy. *Vestnik Akad. Nauk Kazakh. S.S.R.* 11, No. 8, 17-27 (1955).—Owing to the short supply of H_2SO_4 in the U.S.S.R. and the consequent high cost of making superphosphate from phosphate rock in Kazakhstan, methods were sought to use local raw materials in place of H_2SO_4 . Na_2CO_3 , Na_2SO_4 , and minerals contg. the latter such as thenardite, astrakhanite, and mirabilite were investigated. When phosphate rock was ignited with Na_2CO_3 , the resulting product had the following approximate formulas: (a) $7.2 CaO \cdot 1.8 Na_2O \cdot 3 P_2O_5$ and (b) $7.4 CaO \cdot 1.8 Na_2O \cdot 3 P_2O_5$. When the phosphate rock was ignited with Na_2SO_4 and coal the resulting product had the following formulas: (a) $7.7 CaO \cdot 1.77 Na_2O \cdot 3 P_2O_5 \cdot SO_3$ and (b) $7.5 CaO \cdot 1.97 Na_2O \cdot 3 P_2O_5 \cdot 0.4 SO_3$. These thermophosphates were in the form of a dry, nonhygroscopic powder whose properties neither changed on long standing nor damaged the packing container. Expts. showed that from a phosphate rock contg. 29.5% P_2O_5 , thermophosphates were obtained which had a total of P_2O_5 22.6, citric acid-sol. P_2O_5 20.89, citrate-sol. P_2O_5 13.7, and water-sol. P_2O_5 0.52%. The degree of transformation of P_2O_5 into the citric acid-sol. form was 94.9%. Expts. were conducted on a semi-industrial scale. A rotating, brick-lined tubular furnace was used such as is employed in the cement industry. Mixtures of phosphate rock-thenardite and phosphate rock-mirabilite were investigated. In the case of the phosphate rock-thenardite mixt. 71.0-80.07% of the total P_2O_5 (13.18-21.1%) was in the citric acid-sol. form after a one-stage ignition. The reaction time for phosphate rock — 5-1-3 mesh was 10 min. while that of rock of — 80 mesh was 27 min. In the case of the phosphate rock anhyd. mirabilite mixts. a 2-stage ignition was used. It was found that a phosphate rock contg. 24.5% P_2O_5 in a mixt. contg. 30% coke and 40% sulfate produced a thermophosphate, after a 2-stage ignition, contg. 17.08% citric acid-sol. P_2O_5 . The most economical ratio of phosphate rock to sulfate was concluded to be 100:40.

Martin Deckerian

LYUDOGOVSKIY, G.I.

Paths of development of production of phosphate fertilizers from Kazakhstan raw materials. A. B. Bekturov and G. I. Lyudogovskii. *Vestnik Akad. Nauk Kazakh. S.S.R.* 11, No. 9 (Whole No. 123), 27-32 (1965).—The methods employed in the production of P fertilizers from phosphate mineral materials available in Kazakhstan for thermal treatment are summarized. The agglomeration method, with a particle size of 1-3 mm, and by using the thermal process for a 2-stage production of ribbon- or belt-formed agglomerate, is highly recommended for phosphorite meal. The product formed from phosphorite-sulfate materials contains 18.5% total phosphoric acid or 17% citrate-sol. phosphoric acid, attained by the use of phosphorite 707, astrakhanite 415, sulfate 1414, and coke 514 kg. per ton of thermophosphate product. The 1-3-mm. particle size gives the best calcining and most complete utilization of the sulfates.

G. M. Korolapoff

LYUDOGOVSKIY, G.I.

Future development of ferrous metallurgy in Kazakhstan. Vest.AN
Kazakh.SSR 12 no.6:20-29 Je '56. (MLRA 9:8)

1. Predstavlena akademikom AN KazSSR R.A. Borukayevym.
(Kazakhstan--Metallurgy)

5(1)

PHASE I BOOK EXPLOITATION

SOV/2648

Akademiya nauk Kazakhskoy SSR. Institut khimicheskikh nauk

Trudy, tom 1: Fiziko-khimicheskiye i tekhnologicheskkiye issledovaniya khimicheskogo syr'ya Kazakhstana (Transactions of the Institute of Chemical Sciences, Kazakh SSR Academy of Sciences, Vol 1: Physicochemical and Technological Studies of Chemical Raw Materials of Kazakhstan) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1957. 94 p. Errata slip inserted. 900 copies printed.

Ed. (Title page): A.B. Bekturov, Academician, Kazakh SSR Academy of Sciences; Ed. (Inside book): V.V. Aleksandriyskiy; Tech. Ed.: P.F. Alferov.

PURPOSE: This book is intended for chemical specialists, engineers, and researchers in the field of chemical production.

COVERAGE: The book is a collection of articles dealing with the following: chemical composition and hydrochemical nature of water sources of Chul'-Adyr sulfate deposits; conditions for the reduction of fused phosphates from Karatau Phosphorites; problems in

Card 1/3

Transactions of the Institute (Cont.)

SOV/2648

the alkali method of processing borate ore; and physicochemical studies in the solubility of systems which contain borax, sodium carbonate, and sodium bicarbonate. One article discusses the production of "thermophosphates" (phosphate fertilizers prepared without the use of sulfuric acid). The collection includes work on the investigation of a method of separating phosphorus from vanadium in cation exchange resins. No personalities are mentioned. References are given at the end of each article.

TABLE OF CONTENTS:

Foreword	4
Mun, A.I., and A.B. Bekturov. The Chemical Composition of Salts and the Hydrochemical Nature of Salt Sources in the Chul'-Adyr Deposit	5
Bekturov, A.B., and V.V. Tikhonov. Investigation of Conditions for the Reduction of Sulfates of Sodium and Magnesium by Charcoal	20
Tikhonov, V.V., and A.B. Bekturov. Study of Conditions for the Reduction of Astrakanite by Carbon	30
Card 2/3	
Card 3/3	12-4-59

SOV 137-58-9 18442

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, No 4, p 36 (USSR)

AUTHORS: Bokov, I. I., Lyudogovskiy, G. I.

TITLE: Behavior of Chromium and Phosphorus in the Oxidizing Smelting of Iron-chromium-phosphorus Alloys (Povedeniye khroma i fosfora pri okislitel'noy plavke zhelezo-khromo-fosforistykh splavov)

PERIODICAL: Izv. AN KazSSR. Ser. gorn. dela, metallurgii, stroitel'stvo i stroymaterialov, 1957, Nr 5 (16), pp 112-115

ABSTRACT: The behavior of Cr and P contained in iron in various ratios during oxidizing smelting was studied under laboratory conditions. Three alloys containing 0.88%-6.84% Cr and 2.42 to 0% P and having Cr: P ratios of 1:1 and 1:3 were investigated. The smeltings were carried out in Nr 5 corundum crucibles with 100-g samples of alloy in a furnace with a graphite heater. Chemically pure Fe_2O_3 was used in the role of oxidizer. The amount of the latter necessary for the complete oxidation of the impurities was taken as 100%. Experiments were carried out at 1400-1500°C with additions of 20, 50, 100, 150, and 200% of the theoretical amount of oxidizer. Upon reaching the given temperature the

Card 1/2

SOV/137 58-9 18442

Behavior of Chromium and Phosphorus (cont.)

mass was held for thirty minutes; then the metal and the slag were rapidly cooled and analyzed chemically. It is established that in alloys with high [Cr] and [P] the oxidation of impurities proceeds in the same order as during the oxidizing smelting of alloys with low [Cr] and [P]. Si, C and Mn of the alloy oxidize first; Cr and P oxidize last. The order and the degree of the oxidation of impurities do not change even in the case when alloys containing more [P] than [Cr] are subjected to oxidizing smelting. The better oxidizability of P at a lower temperature is verified. An increase in the amount of the oxidizer lowers the effect of temperature on the degree of oxidation of P. The content of Fe in the slag (calculated as FeO) constitutes from 60 to 90%, that of Cr oxides from 6 to 34%, that of the oxides of P up to 8%. The petrographic investigation of the slags established in them a high content of chromespinelides with a larger amount of Fe oxides than that required for the formation of chromite ($\text{FeO} \cdot \text{Cr}_2\text{O}_3$).

Ye. K.

1. Chromium-iron-phosphorus alloys--Melting 2. Chromium--Oxidation
3. Phosphorus--Chemical reactions 4. Metals--Oxidation
Card 2/2

LYUDOGOVSKIY, G.I.

Distr: 4E2c

¹⁸ The nature of slags in ferrochrome production. G. I. Lyudogovskii and M. V. ¹⁸ Ibragimova. *Vestnik Akad. Nauk Kazakh. S.S.R.* 13, No. 5, 52-60 (1967).—A lab. study of ferrochrome slags was made by using mineralogical, petrographic, and viscosimetric measurements. The slags came from furnaces with two different ores, one producing a Mg-O-Al₂O₃-SiO₂ slag and the other a CaO-SiO₂ slag. The melting temp. and liquid range were measured by using a Pt microfurnace. Viscosity measurements were made by using a rotation viscometer. Slags from both the high-C and the low-C ferrochrome processes were examd. All slags had a liquid range of about 250°, being fluid only above the usual metal temp. (1500°). The high-C ferrochrome slags remain sticky to a higher temp. Some changes in viscosity were caused by changes in the compn. during the measurement. Reaction with the graphite crucible caused marked reductions in the Cr content, which was present in the slag as Cr oxides.

Ray W. Guard

4
1

AUTHORS: Adamchuk, V. A., Candidate of Economic Sciences 30-9-35/48
Lyudogovskiy, G. I., Candidate of Technical Sciences
Ovchininskiy, N. V., Candidate of Technical Sciences

TITLE: On the Productive Power Reserves of the Great Turgay
(Proizvoditel'nyye sily Bol'shogo Turgaya).

PERIODICAL: Vestnik AN SSSR, 1957, Vol. 27, Nr 9, pp. 111-114 (USSR)

ABSTRACT: At the suggestion of the Kazakh AN and the All-Union Ministry of Geology and Conservation of Mineral Resources of the USSR, regional economic problems of the Great Turgay region were under discussion. More than 430 representatives of all scientific and economic institutions of Kazakhstan participated in the session. Numerous scientists from other Union republics also were present. Baishhev, the president of the AN of the Kazak Republic, opened the session. The president of the research council of the AN USSR talked on the planned utilization of the natural wealth of the entire Kustanay region. The energy-technical problems in connection with the planned industrialization were thoroughly discussed. S. P. Tokaryev, a representative of the State

Card 1/2

On the Productive Power Reserves of the Great Turgay 30-9-35/48

Planning Office of the USSR talked on the prospects of development of the Kustanay region. Among other things he said that above all efficient mining enterprises had to be founded. He said that the development of the system of channels and water reservoirs of the Great Turgay also is of greatest importance.

AVAILABLE: Library of Congress.

Card 2/2

Spetsred.
 BAISHEV, S.B., akademik, otv.red.; NEMCHINOV, V.S., akademik, otv.red.;
 BATISHCHEV-TARASOV, S.D., inzh.-geolog, laureat Leninskoy premii,
 red.; BOGATYREV, A.S., red.; KHRAMKOV, I.P., red.; BORUKAYEV, R.A.,
 akademik, otv.red.; TOPORKOV, D.D., laureat Leninskoy premii, red.;
 NOVOKHATSKIY, I.P., kand.geologo-mineralog.nauk, starshiy nauchnyy
 sotrudnik, red.; PONOMAREV, V.D., doktor tekhn.nauk, otv.red.;
 ADAMCHUK, V.A., kand.ekon.nauk, starshiy nauchnyy sotrudnik, red.;
 LYUDOGOVSKIY, G.I., kand.tekhn.nauk, red.; ALEKSEYEV, G.M., kand.
 ekon.nauk, starshiy nauchnyy sotrudnik, red.; SEMENOV, M.N., red.;
 SUVOROVA, I.I., red.; MOSKVICHEVA, L.N., red.; KUZNETSOV, Yu.N.,
 red.; MASLENNIKOV, L.I., spetsred.; POLIVYANNYY, I.R., spetsred.;
 LYSENKO, I.Z., kand.tekhn.nauk, spetsred.; ALFEROVA, P.F., tekhn.red.

[Proceedings of the joint scientific session in Kustanay devoted
 to the problems of the Turgay regional and economic complex]
 Trudy ob"edinennoi Kustanayskoi nauchnoi sessii, posvyashchennoi
 problemam Turgaitskogo regional'no-ekonomicheskogo kompleksa.
 Kustanay, 1957. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR. Vol.1.
 [Materials of plenary sessions] Materialy plenarnykh zasessii.
 1958. 150 p. Vol.2. [Geological section] Geologicheskaya sektsiya.
 1958. 393 p. Vol.3. [Materials of the mining metallurgy section]
 Materialy gornometallurgicheskoi sektsii. 1958. 318 p. (MIRA 11:12)

1. Ob"yedinennaya Kustanayskaya nauchnaya sessiya, posvyashchennaya
 problemam Turgaitskogo regional'no-ekonomicheskogo kompleksa.

(Continued on next card)

BAISHEV, S.B.---(continued) Card 2.

2. AN Kazakhskoy SSR, vitse-president AN Kazakhskoy SSR (for Baishev).
3. AN SSSR, predsdatel' Soveta po izucheniyu proizvoditel'nykh sil AN SSSR (for Nemchinov).
4. Kustanayskiy geologo-razvedochnyy trest (for Batishchay-Tarasov).
5. Ministr geologii i okhrany nedr Kazakhskoy SSR (for Bogatyrev).
6. Sekretar' Kustanayskogo obkoma Kommunisticheskoy partii Kazakhstana (for Khramkov).
7. AN Kazakhskoy SSR, predsdatel' otdeleniya mineral'nykh resursov AN Kazakhskoy SSR (for Borukayev).
8. Zamestitel' direktora Kazakhskogo filiala Vsesoyuznogo nauchno-issledovatel'skogo instituta mineral'nogo syr'ya (for Toporkov).
9. Institut geologii i tekhnicheskikh nauk AN Kazakhskoy SSR (for Novokhatskiy).
10. Zamestitel' direktora Instituta metallurgii i obogashcheniya AN Kazakhskoy SSR (for Ponomarev).
11. Sovet po izucheniyu proizvoditel'nykh sil AN SSSR (for Adamchuk, Alekseyev).
12. Zaveduyushchiy laboratoriyey chernykh metallov Instituta metallurgii i obogashcheniya AN Kazakhskoy SSR (for Lyudogovskiy).
13. Uchenyy sekretar' Soveta po izucheniyu proizvoditel'nykh sil AN Kazakhskoy SSR (for Maslennikov).
14. Zamestitel' predsdatelya Soveta po izucheniyu proizvoditel'nykh sil AN Kazakhskoy SSR (for Lysenko).

(Kustanay Province--Economic conditions)

(Kustanay Province--Mines and mineral resources)

BOKOV, I.I.; LYUDOGOVSKIY, G.I.

Certain characteristics of melts in the system iron phosphate -
chromium oxide. Izv.AN Kazakh.SSR.Ser.met., obog.1 ogneup.
no.2:71-76 '58. (MIRA 16:2)
(Systems (Chemistry)) (Fused salts)

DOV, 25-59-1-25, 11

AUTHOR: Lyudogovskiy, G.I., Candidate of Technical Sciences

TITLE: Metallurgical Yakutiya (Yakutiya metallurgicheskaya)

PERIODICAL: Nauka i zhizn', 1959, Nr 1, pp 61-64 and p 3 of center-fold (USSR)

ABSTRACT: The author describes his impressions gained on the occasion of a visit by a group of scientific co-workers of the USSR Academy of Sciences to the Yakutsk ASSR. Since 1950, prospecting for iron ore and coal deposits has been carried on in South Yakutiya. It has been discovered that the South Yakutiya territory possesses the biggest coal basins, with immense deposits of high-quality coking coal. These deposits spread over 750 km and the total resources are estimated at 40 billion tons. The Chul'makenskoye and Neryungra deposits are of special importance. The future output of the latter might even reach ten million tons per year. The Tayezhnoye, Pionerskoye and Sivagli iron ore deposits amount to about half a billion tons. The total amount of the Aldan ore resources are estimated at two billion tons.

Card 1/2

SOV, 25-69-1-22, 5.

Metallurgical Yakutsk

Plans are being considered to build a metallurgical plant near the village of Chul'man, and to connect this place with the main line of the Trans-Siberian-Railroad by constructing a railroad from Bam to Chul'man. Thus the first Eastern Siberian metallurgical plant will be constructed in the course of the new 7-year plan and is one of the basic projects for the third metallurgical base of the USSR - the Southern Yakutsk deposits. There are five drawings.

Card 2/2

BARDIN, I.P., akademik, glavnyy red. [deceased]; VOL'FKOVICH, S.I., akademik, otv.red.toma; UVAROV, G.V., red.toma; KOMAROV, V.P., dotsent, red.toma; LAVRENT'YEV, M.A., akademik, red.; DIKUSHIN, V.I., akademik, red.; NEMCHINOV, V.S., akademik, red.; VEYTS, V.I., red.; LEVITSKIY, O.D., red.; NEKRASOV, M.N., red.; PUSTOVALOV, L.B., red.; KHACHATUROV, T.S., red.; ROSTOVTSSEV, M.F., akademik, red.; POPOV, A.N., red.; GRAFOV, L.Ye., red.; GASHEV, A.D., red.; PROBST, A.Ye., prof., red.; VASYUTIN, V.F., prof., red.; KROTOV, V.A., prof., red.; VASIL'YEV, P.V., doktor ekonom.nauk, red.; LYUDOGOVSKIY, G.I., kand.tekhn.nauk, red.; LETUNOV, P.A., kand.geol.-mineral.nauk, red.; SHKOL'NIKOV, M.G., kand.ekonom.nauk, red.; BANKVITSER, A.L., red. izd-va; BRUZGUL', V.V., tekhn.red.

[Chemical industry] Khimicheskaya promyshlennost'. Moskva, 1960.
202 p. (MIRA 13:7)

1. Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil. Sibirskoye otdeleniye. 2. Chleny-korrespondenty AN SSSR (for Veyts, Levitskiy, Nekrasov, Pustovalov, Khachaturov). 3. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Rostovtsev). 4. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Popov). 5. Zamestitel' predsedatelya Gosplana RSFSR (for Grafov). 6. Chlen Gosplana RSFSR (for Gashev). 7. Zamestitel' predsedatelya Gosudarstvennogo komiteta Soveta Ministrov SSSR po khimii (for Uvarov).

(Chemical industries)

BARDIN, I.P., akademik, glavnyy red. [deceased]; KHACHATUROV, T.S., otv. red.toma; SMIRNOV, A.P., zam.otv.red.toma; VERKHOVSKIY, I.A., red.toma; NEKRASOVA, R.I., red.toma; TSENIN, S.S., red.toma; LAVRENT'YEV, M.A., red.; VOL'PKOVICH, S.I., red.; DIKUSHIN, V.I., red.; NEMCHINOV, V.S., red.; VETTS, V.I., red.; LEVITSKIY, O.D., red.; NEKRASOV, N.N., red.; PUSTOVALOV, L.V., red.; ROSTOVTSSEV, N.F., akademik, red.; POPOV, A.N., red.; GRAFOV, L.Ye., red.; GASHEV, A.D., red.; PROBST, A.Ye., prof., red.; VASYUTIN, V.F., prof., red.; KROTOV, V.A., prof., red.; VASIL'YEV, P.V., doktor ekonom.nauk, red.; LYUDOGOVSKIY, G.I., kand.tekhn.nauk, red.; LETUNOV, P.A., kand.geol.-miner.nauk, red.; SHKOL'NIKOV, M.G., kand.ekon.nauk, red.; RODINA, Ye.D., red.izd-va; GUSEVA, A.P., tekhn.red.

[Transportation; proceedings of the Conference on the Development of Productive Forces of Eastern Siberia] Transport; trudy Konferentsii po razvitiyu proizvoditel'nykh sil Vostochnoi Sibiri. Moskva, Izd-vo Akad.nauk SSSR, 1960. 203 p. (MIRA 13:10)

(Continued on next card)

BARDIN, I.P.--(continued) Card 2.

1. Konferentsiya po razvitiyu proizvoditel'nykh sil Vostochnoy Sibiri, 1958. 2. Chleny-korrespondenty AN SSSR (for Khachaturov, Veyta, Levitskiy, Nekrasov, Pustovalov). 3. Vsesoyuznaya akademiya sel'sko-khozyaystvennykh nauk imeni V.I.Lenina (for Rostovtsev). 4. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Popov). 5. Zam.predsdatelya Gosplana RSFSR (for Grafov). 6. Chlen Gosplana RSFSR (for Gashev). 7. Institut kompleksnykh transportnykh problem AN SSSR (for Khachaturov, Verkhovskiy, Nekrasova, Tsenin, Smirnov).
(Siberia, Eastern--Transportation)

LYUDOGOVSKIY, G.I.; SKOBNIKOV, M.L., nauchnyy red.; NEMANOVA, G.F., red.
izd-va; BYKOVA, V.V., tekhn. red.

[Industrial specifications for the quality of raw minerals; a
manual for geologists] Trebovaniia promyshlennosti k kachestvu
mineral'nogo syr'ia; spravochnik dlia geologov. Moskva, Gos.
nauchno-tekhn. izd-vo lit-ry po geol. i okhrane neдр. No.63.
[Vanadium] Vanadii. Nauchn. red. M.L.Skobnikov. Izd.2., perer.
1960. 40 p. (MIRA 14:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mine-
ral'nogo syr'ya.

(Vanadium)

BARDIN, I.P., akademik, glavnyy red. [deceased]; NEKRASOV, N.N., otv. red.toma; SLAVIN, S.V., doktor ekon.nauk, red.toma; SHKOL'NIKOV, M.G., kand.ekon.nauk, red.toma; LAVRENT'YEV, M.A., akademik, red.; VOL'FKOVICH, S.I., akademik, red.; DIKUSHIN, V.I., akademik, red.; NEMCHINOV, V.S., akademik, red.; VEYTS, V.I., red.; LEVITSKIY, O.D., red.; PUSTOVALOV, L.V., red.; KHACHATUROV, T.S., red.; ROSTOVTSSEV, N.F., akademik, red.; POPOV, A.N., red.; GRAFOV, L.Ye., red.; GASHEV, A.D., red.; PROBST, A.Ye., prof., red.; VASTUTIN, V.F., prof., red.; KROTOV, V.A., prof., red.; VASIL'YEV, P.V., doktor ekon.nauk, red.; LYUDOGOVSKIY, G.I., kand.tekhn.nauk, red.; LETUNOV, P.A., kand.geol.-mineral.nauk, red.; MAZOVER, Ya.A., red. izd-va; KASHINA, P.S., tekhn.red.

[Comprehensive regional and interregional problems; [conference reports]] Raionnye i mezhrayonnye kompleksnye problemy; [trudy konferentsii]. Moskva, Izd-vo Akad.nauk SSSR, 1960. 190 p. (MIRA 14:1)

1. Konferentsiya po razvitiyu proizvoditel'nykh sil Vostochnoy Sibiri'. 1958. 2. Chleny-korrespondenty AN SSSR (for Nekrasov, Veyts, Levitskiy, Pustovalov, Khachaturov). 3. Sovet po izucheniyu proizvoditel'nykh sil pri Prezidiume Akademii nauk SSSR (for Nekrasov, Shkol'nikov, Slavin). 4. Predsedatel' Soveta po izucheniyu proizvoditel'nykh sil pri Prezidiume AN SSSR (for Nemchinov). 5. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Rostovtsev). 6. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Panov). (Siberia, Eastern--Economic policy)

BARDIN, I.P., akademik, otv.red. [deceased]; LYUDOGOVSKIY, G.I., zam. otv.red.; PUSTOVALOV, L.V., red.; FEDOTOV, A.A., red.; GERBOV, V.L., red.; OVCHININSKIY, N.V., red.; SHLEPOV, V.K., red. izd-va; SUSHKOVA, L.A., tekhn.red.

[Development of ferrous metallurgy in areas to the east of the Lake Baikal] Problemy razvitiia chernoi metallurgii v raionakh vostochnoe oz. Baikal. Moskva, 1960. 190 p.

(MIRA 14:2)

1. Akademiya nauk SSSR. Sovet po izucheniyu proizvoditel'nykh sil.
2. Chlen-korrespondent AN SSSR (for Pustovalov).
(Siberia, Eastern--Iron industry)

PLANE 1 BOOK PIRATION 80Y/2233

Charmaya Metallurgy (Pattana Metallurgy, New York, Inc. as AN SSGH, Inc.)
275 p. (Series: Research profiled with all Technology 6101)
Kinnia alloy inserted, 2,000 copies printed.

Kitata allp inserted. 2,000 copies printed.

K.I. O.I. Lyudskovskiy, Candidate of Technical Sciences, Ed. of Publishing House: O.K. Kuznetsov; Tech. Ed.: Y.Y. Mamedov; Editorial Board of the vol. A.B. Dvorin, M.Y. Gornitskiy, Candidates of Technical Sciences, A.B. Polubnyy, Doctor of Technical Sciences, and A.A. Podinov, Engineer; Editorial Board of Series: I.P. Bardin (overseas), A.G. Gerasimov, Academy of Sciences USSR (Chief, Ed.): M.A. Lysenko, Ye. Kozlov, Academy of Sciences USSR; Ed.: V.I. Volynskiy, Academician, Academy of Sciences USSR; V.I. Ditsel, Academician, Academy of Sciences USSR; V.I. Kuznetsov, Member of Academy of Sciences USSR; V.I. Yezus, Corresponding Member, Academy of Sciences USSR; M.N. Shumakov, O.D. Lavitskiy, Corresponding Member, Academy of Sciences USSR; M.N. Shumakov, Corresponding Member, Academy of Sciences USSR; I.B. Pasterovskiy, Corresponding Member, Academy of Sciences USSR; I.B. Dneprovskiy, Corresponding Member, Academy of Sciences USSR; A.I. Kozlovskiy, Academician, Academy of Agricultural Sciences USSR; A.B. Popov, Member, Academy of Building and Architectural Sciences USSR; L. Ye. Ostrovskiy, Deputy Chairman, State Planning Committee of the Council of Ministers USSR; A.D. Gashov, Member, State Planning Committee of the Council of Ministers USSR; A.Ye. Probst, Professor, V.P. Yegorin, Professor, V.A. Kozlov, Professor, V.Y. Vasil'yev, Doctor of Technical Sciences, V.I. Lyudskovskiy, Candidate of Technical Sciences, P.A. Dvornikov, Candidate of Geology and Mineralogy, and M.O. Shol'manov, Candidate of Economics.

PURPOSE: This collection of papers is intended to furnish information on industrial resources in Eastern Siberia and to provide a basis for future developmental planning in the field of ferrous metallurgy.

COVER SHEET: The collection is a summary of the proceedings of the 2nd Panama Afro-Albanian Conference of the Joint Conference of Afro-Albanians of the Academy of Sciences, 1980, the 8th Afro-Albanian Conference, 1981, and the 1st Afro-Albanian Conference of the Afro-Albanian Resources of Eastern Siberia. The collection deals with four main areas of development in Eastern Siberia: 1) Mineral resources, 2) the fuel base, 3) prospects for the development of a forest and wildlife, and 4) problems in the development of agro-industry. A list of the 110 members of the Section with their affiliations is found in the Appendix. References accompany several of the articles.

SECTION III. PROBLEMS FOR THE DEVELOPMENT OF FORCES METALLURGICAL IN EASTERN SIBERIA

Shlyayeva, I. A. Prospects for the Development of Ferrous Metallurgy in Eastern Siberia and Its Role in the Establishment of a Third Metallurgical Base in the USSR

132

PROPOSAL FOR THE DEVELOPMENT OF FERROUS MANGANESE
IN AREAS EAST OF LAKE BAYDOL

146

size country's "4. Prospects for the development of Petros Neallung
to Kranojurskiy Kny

164

OVERLANDTUNG, N.Y. Known: Effectiveness of the New Metallurgical Plants in Siberia

178

ANNUAL REP. ON TECHNOLOGICAL POTENTIAL OF THE NEW METALLURGICAL PLANTS OF EASTERN SIBERIA

169

card 6/8

9

OVCHININSKIY, Nikolay Vladimirovich; TURKIN, Aleksandr Vladimirovich;
KOROBV Lev Nikolayevich; LYUDOGOVSKIY, G.I.. kand. tekhn.
nauk, otv. red.; PEVZNER, G.Ye., red. izd-va; SIMKINA, G., tekhn.
red.

[Expansion of ferrous metallurgy in the central regions of the
U.S.S.R.; importance for the national economy of the industrial
utilization of the Kursk Magnetic Anomaly] Voprosy razvitiia chernoi
metallurgii v tsentral'nykh raionakh SSSR; narodnokhoziaistvennoe
znachenie promyshlennogo osvoeniia Kurskoi magnitnoi anomalii. Mo-
skva, Izd-vo Akad. nauk SSSR, 1961. 137 p. (MIRA 14:9)

(Kursk Magnetic Anomaly—Iron mines and mining)
(Metallurgical plants)

SATPAYEV, K.I., akademik; LYUDOGOVSKIY, G.I., kand.tekhn.nauk

Metallurgy of ferrous metals and farming. Vest. AN Kazakh.SSR 19 no.10:
3-6 0 '63. (MIRA 17:1)

TSITSIN, N.V., akademik; CHERKASSKIY, Ye.S.; BUSHCHIK, T.N.; SHMAL'KO, V.F.;
LYUDOVA, G.L.; KILIMNIK, Ye.Ye.; BELYAYEVA, A.S.; Primali
uchastiye: AZIYASHVILI, L.N.; ANTONOVA, I.I.; VOLKOVA, A.A.;
DOBROCHINSKAYA, I.B.; MIROSHNICHENKO, O.N.; YUZHAKOVA, N.P.

New data on the control of cabbage flies (*Chortophila brassicae*
Bouché and *Chortophila floralis* Fall.). Dokl.AN SSSR 144
no.2:457-460 My '62. (MIRA 15:5)

1. Glavnyy botanicheskiy sad AN SSSR, Opytno-pokazatel'nyy
sovkhoz im. Mossoveta i Sovkhoz im. A.M.Gor'kogo.
(Cabbage—Diseases and pests)

ACC NR: AP6010162

SOURCE CODE: BU/0001/65/000/002/0064/0074

AUTHOR: Lyudskanov, A.

ORG: none

TITLE: Start of work on machine translation in Bulgaria

SOURCE: Bulgarska akademiya na naukite. Spisanie, no. 2, 1965, 64-74

TOPIC TAGS: machine translation, cybernetics, operations research

ABSTRACT: The article presents 1) a survey of the modern linguistic trends in Bulgaria (from 1937 on); 2) a survey of the development of cybernetics in Bulgaria during the 1950-1960 period, and the translation algorithms of the early 60's; 3) the broadening of the interest in machine translation (in Bulgaria) following the Fifth International Slavistics Congress in Bulgaria; 4) a description of the operation of the newly-created (1964) group "Machine Translation and Mathematical Linguistics" at the section "Mathematical Statistics and the Theory of Probability" at the Mathematical Institute with the Computer Center of the Bulgarian Academy of Sciences; and 5) an outline of parallel statistical studies of the structure of the Bulgarian language, a report of the use of machines in processing of materials for the new Bulgarian dictionary, and the like. The author notes in an appendix to the article that the first Russian-Bulgarian experimental translation shown has been carried out on the Minsk-2 computer in March of 1965. [JPRS]

SUB CODE: 05, 06, 09, 12 / SUBM DATE: none / ORIG REF: 030 / OTH REF: 001

Card 1/1 *SM*

L 62564-65 BXT/EED-2/T/EWP(1) Pg-4/Pk-4/Pq-4 IJP(c) GG/BB

ACCESSION NR: AP5019471

UR/0315/65/000/006/0035/0038
651.926.011.56(497.2)

AUTHOR: Lyudskanov, A. (Sofia)

TITLE: The state of developments in machine translation in the National Republic of Bulgaria

SOURCE: Nauchno-tehnicheskaya informatsiya, no. 6, 1965, 35-38

TOPIC TAGS: computer, machine translation, cybernetic system, algorithm, language / BI computer, Minsk 2 computer, Aritma computer

ABSTRACT: A brief survey of the developments in machine translation and related subjects in Bulgaria is presented. Bulgarian cybernetic activity started with the work of mathematicians. This was followed by the development of computer technology and by the application of cybernetics to biology and medicine. The philosophy of cybernetics was next attacked, and the application of cybernetics to various mathematical sciences was attempted. Next, the cybernetic approach to the solution of linguistic problems was undertaken. All this work was augmented by the development of the computer BI. Papers on the symbolic character of language, on the statistical parameters of the written Bulgarian language, and on

Card 1/3

L 62564-65

ACCESSION NR: AP5019471

7

similar subjects soon began to appear. This activity led to the growth of interest in mechanical translation and, in the early sixties, several papers were published on this subject, including the present author's four articles, under the common title of "Ponyatiye algoritma i yego znachenije pri mashinnom perevode" ("The Concept of the Algorithm and its Significance in Machine Translation"). Further work and discussions culminated in the development of a theory for Russian-Bulgarian machine translation and in the introduction of a course on the bases of machine translation by the division of Russian Philology at the University of Sofia. Experimental work on translation was started in 1964 by a group organized for this purpose. Simultaneously, some experiments on machine translation were performed on the computer "Minsk-2," and translations from the Russian and French were completed. The article presents in some detail the matter of programming and the memory content of the computers and explains the theoretical work of Professor I. Lekov and P. Mutaftchiyev on computer linguistics. Activities of the Linguistic Seminar at the Mathematics Institute of the Bulgarian AS (under the leadership of B. Penkov and B. Sendov (Sendrov)) are being continued. A dictionary of Bulgarian language, to be used with the computing-analytical machine "Aritma," is being compiled by a group led by M. Yanakiyev. Several theses completed at the University of Sofia have been devoted to the above activity, while the Institute for Foreign Students started its work on programmed education.

Card 2/3

L 62564-65

ACCESSION NR: AP5019471

Since 1965, the problems of machine translation have been included in the planning work of TsINTI at the Committee on Matters of Scientific and Technical Progress.

ASSOCIATION: none

SUBMITTED: 09Mar65

ENCL: 00

SUB CODE: DP

NO REF SOV: 000

OTHER: 031

Card

3/3

WATERL. / Soil Science. Distribution. Pollution.
Erosion.

J-5

Abstr Jour: Ref Earth-Sci., No 2, 1988, 3-42.

Author : Dobrow, D. tri., Lyndstrom, W. F.

Inst : Not given.

Title : Afforestation and Fight Against Flood Torrents
Aerial Land on Denuded Hills and Formation of
Ravines Leading To Flooding and Widespread.

Orig Pub: Geograph. Magazine, 1987, 13, No 3, 102-106.

Abstract: No abstract.

Card 1/1

55

LYUDSKOV, B.

Shopping centers. Sov. torg. 35 no.8:46-49 Ag '62.
(Shopping centers) (MIRA 15:8)

LINETSKIY, Yefim Yakovlevich; SAVRANSKIY, David Yakovlevich;
LYUDSKOV, B.I., red.; EL'KINA, E.M., tekhn.red.

[Collection of problems for practice work on the
economics of commerce] Sbornik zadaniy dlia prakti-
cheskikh zaniatii po ekonomike trgovli. Izd.2., dop.
i perer. Moskva, Gos.izd-vo torg.lit-ry, 1961. 231 p.
(Distributive education) (MIRA 14:12)

LOPATKIN, V.G., dotsent, kand.ekonom.nauk, red.; LYUDSKOV, B.P., red.;
ISHKOVA, A.K., red.; KAGANOVA, A.A., red.; CHERVYAKOVA, L.S.,
red.; GRANOVSKAYA, I.E., red.; MEDRISH, D.M., tekhn.red.

[Collected scientific works] Sbornik nauchnykh rabot. Pod red.
V.G.Lopatkina. Moskva, Gos.izd-vo tog.lit-ry, 1956. 240 p.
(MIRA 14:2)

1. Moscow. Nauchno-issledovatel'skiy institut trgovli i obshchestvennogo pitaniya.
(Food industry)

2 YL'Dshet, B.I.

GRIN, Georgiy Vladimirovich; LYUDSKOV, B.P., redaktor; BALASHOV, V.I.,
tekhnicheskly redaktor.

[Maintenance of weighing instruments and their use in stores; a
manual for storekeepers] Ukhod za vesoizmeritel'nymi priborami i
pol'zovanie imi v magazine; pamiatka dlia prodavtsa. Moskva, Gos.
izd-vo torg.lit-ry, 1957. 51 p. (MLRA 10:5)
(Scales (Weighing instruments))

LYUDSKOV, B.P.
BER:ER, Iosif Noyekhovich; DUBONOS, Nikolay Faddeyevich; KORZHENEVSKIY, I.I.,
kand.ekon.nauk; KHIMENKO, I.S.; LYUDSKOV, B.P., red.; SUDAK, D.M.,
tekhn.red.

[Planning economic activities of commercial organizations]
Planirovaniye khoziaistvennoi deiatel'nosti torgovoi organizatsii.
Moskva, Gos. izd-vo torgovoi lit-ry, 1957. 148 p. (MIRA 11:4)
(Russia--Commerce)

BAKANOV, Mikhail Ivanovich, prof., doktor ekonom.nauk; LYUDSKOV, B.P.,
red.; GUROVA, O.A., tekhn.red.

[Marketing costs in the U.S.S.R.] Izderzhki tovarnogo obrashche-
niia v SSSR. Moskva, Gos.izd-vo tog.lit-ry, 1959. 335 p.
(MIRA 13:7)

(Marketing--Costs)

GUZMAN, Abram Aronovich; KURKIN, Sergey Ivanovich; LYUDSKOV, B.P., red.;
MAMONTOVA, N.N., tekhn.red.

[Assembling, operating, and repairing vending machines] Montazh,
tekhnicheskoe obsluzhivanie i tekushchii remont torgovykh avto-
matov. Moskva, Gos.izd-vo torg.lit-ry, 1960. 131 p.

(MIRA 13:12)

(Vending machines)

BELEN'KIY, Natan Solomonovich; LYUDSKOV, B.P., red.; ISKOVA, A.K.,
red.; BABICHEVA, V.V., tekhn.red.

[Collection of problems and exercises in commercial arithmetic]
Sbornik zadach i uprazhnenii po khoziaistvennym vychisleniam.
Izd.5., perer. Moskva, Gos.izd-vo torg.lit-ry, 1960. 215 p.
(MIRA 13:7)

(Arithmetic, Commercial)

IL'IN, N.I.; SVITICH, S.S.; SOKOLOV, V.D.; LYUDSKOV, B.P., red.;
BABICHEVA, V.V., tekhn.red.

[Accounting in enterprises and organizations of state commerce]
Bukhgalterskii uchet v predpriistiiakh i organizatsiakh gosudarstvennoi torgovli. Moskva, Gos.izd-vo torg.lit-ry, 1960.
719 p. (MIRA 13:7)

(Accounting) (Russia--Commerce)

VELIKORETSKIY, Oleg Abramovich; ZAKHARIN, Aleksandr Davydovich; LYUDSKOV,
B.P., red.; BRODSKIY, M.P., tekhn. red.

[Lighting for stores] Osveshchenie magazinov. Moskva, Gos. izd-vo
torg.lit-ry, 1961. 71 p. (MIRA 14:11)
(Stores, Retail---Lighting)

ANDREYEV, B.I.; BORISOV, I.G.; LEDOVSKIY, S.I.; MALINOVSKIY, E.P.; SAV-
CHENKO, N.A.; LYUDSKOV, B.P., red.; EL'KINA, E.M., tekhn. red.

[Geography of the manufacture of food products in the U.S.S.R.]
Geografiia proizvodstva prodovol'stvennykh tovarov SSSR. By B.I.
Andreyev i dr. Moskva, Gos. izd-vo torg. lit-ry, 1961. 170 p.
(MIRA 14:104)

(Food industry)

KUZIN, Nikolay Ivanovich; LYUDSKOV, B.P., red.; MAMONTOVA, N.N.,
tekhn.red.

[Finances of the state commerce of the U.S.S.R. and their
planning] Finansy gosudarstvennoi trgovli SSSR i ikh planiro-
vanie. Moskva, Gos.isd-vo tog.lit-ry, 1961. 205 p.

(Russia--Commerce)

(MIRA 14:3)

KABANETS, Mikhail Nikitovich; LYUDSKOV, B.P., red.; FURMAN, G.V.,
tekhn. red.

[Profitableness and hidden potentialities for increasing it in
the fruit and vegetable trade] Rentabel'nost' trgovli plodami
i ovoshchami i rezervy ee povysheniia. Moskva, Gos. izd-vo
torg. lit-ry, 1961. 76 p. (MIRA 14:8)
(Ukraine—Fruit trade—Finance) (Ukraine—Vegetable trade—Finance)

GRIGOR'YAN, Grigoriy Semenovich; LYUDSKOV, B.P., red.; BRODSKIY, M.P.,
tekhn. red.

[Problems in the turnover of goods under socialism] Voprosy to-
varnogo obrashcheniia pri sotsializme. Moskva, Gos. izd-vo
torg. lit-ry, 1961. 134 p. (MIRA 14:9)
(Turnover (Business)) (Communism)

BERGER, I.N.; IVANITSKIY, V.I.; KORZHENEVSKIY, I.I.; LYUDSKOV, B.P.,
red.; EL'KINA, E.M., tekhn. red.

[Planning the managerial operations of a retail enterprise]
Planirovanie khoziaistvennoi deiatel'nsoti roznichnoi trgovoi
organizatsii. Moskva, Gos.izd-vo torg.lit-ry, 1961. 190 p.
(MIRA 15:1)

(Retail trade)

GUBANOV, Vladimir Semenovich; ZOLOTAREVSKIY, Iosif Yakovlevich;
SAPRYKIN, Anatoliy Vasil'yevich; LYUDSKOV, B.P., red.;
GROMOV, A.S., tekhn. red.

[Containers; practical manual] Tara; prakticheskoe posobie.
Moskva, Gos. izd-vo torg. lit-ry, 1961. 223 p. (MIRA 15:3)
(Containers) (Freight and freightage)

MURATOV, Sergey Ivanovich; LUTTSAN, V.K., red.; LYUDSKOV, B.P., red.;
EL'KINA, E.M., tekhn.red.

[Vending machines] Torgovye avtomaty. Pod red. V.K.Luttsan.
Moskva, Gos.izd-vo torg.lit-ry, 1961. 358 p.

(MIRA 14:4)

(Vending machines)

STARCHAKOVA, Irina Ivanovna; LYUDSKOV, Boris Pavlovich; AYZENSHTEYN,
I.M., red.; USTINOV, M.T., red.; BRODSKIY, M.P., tekhn. red.

[New developments in the retail trade during 1960] Novoe v
torgovle za 1960 g; sbornik. Leningrad, Gostorgizdat, 1961.
294 p. (MIRA 15:1)

(Retail trade)

KATAL'NIKOV, Ignat'y Fedorovich; KIRAKOZOVA, N.Sh., red.; LYUDSKOV, B.P.,
red.; MEDRISH, D.M., tekhn. red.

[Statistics of Soviet commerce] Statistika sovetskoi torgovli.
Moskva, Gostorgizdat, 1962. 198 p. (MIRA 15:6)
(Russia--Commerce)

ANISOV, Aleksandr Andreyevich; NESTEROV, M.K., red.; LYUDSKOV, B.P.,
red.; EL'KINA, E.M., tekhn. red.

[Organization of accounting in state commerce] Organizatsiia
bukhgalterskogo ucheta v gosudarstvennoi trgovle. Moskva,
Gostorgizdat, 1962. 343 p. (MIRA 15:6)

1. Glavnyy bukhgalter Ministerstva trgovli RSFSR (for Nesterov).
(Accounting) (Russia--Commerce)

STARCHAKOVA, I.I.; LYUDSKOV, B.P.; AYZENSHTEYN, I.M., red.;
USTINOV, M.T., red.; GROMOV, A.S., tekhn.red.

[Innovations in the work of trade enterprises] Novoe v
rabote trgovykh predpriiatii; sbornik. Moskva, Gos-
torgizdat, 1962. 335 p. (MIRA 17:2)

~~LYUDSKOV, P.~~ zasluzhenny master sporta.

Constructing ski jumps and equipping ski centers. Sel'. stroi. 12
no.1:23-26 Ja '58. (MIRA 11:2)

(Skis and skiing)

KUKULEVICH, I.L.; LYUDVIG, A.A.; SHABARIN, A.K., redaktor; GIMPEL'SON, A.Z.,
redaktor; LYUDKOVSKAYA, N.I., tekhnicheskii redaktor

[The organization of wages in enterprises furnishing local building
materials] Organizatsiia zarabotnoi platy na prdpriatiakh mestnykh
stroitel'nykh materialov. Pod red. A.K.Shabarina. Moskva, Gos. izd-
vo lit-ry po stroit. materialam, 1956. 229 p. (MLRA 9:8)
(Building materials industry) (Wages)

KHORUNZHEVA, L.D.; LYUDVIG, A.D.; MASHTAKOVA, Z.A.; TUNAILOVA, L.M.

Extermination of favus in the Bakharden, Geok-Tepinsk, and Ashkhabad Rural Districts. Zdrav. Turk. 5 no.6:28-29 N-D '61. (MLA 15:2)

1. Iz dispansernogo otdela (zav. - L.D.Khorunzheva) kozhno-venerologicheskogo instituta (nauchnyy rukovoditel' - prof. N.F. Rodyakin).

(TURKMENISTAN--FAVUS)

LYUDVIG, G.M., doktor tekhn.nauk, prof.

Subject and tasks of the history of construction. Mat. po 1st.
stroitel. tekhn. no.2:11-26 '62. (MIRA 16:5)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR.
(Construction industry)

LYUDVIG, P.; MONASTYRSKAYA, M.S.; PAVLOV, S.A.; KOSHMAN, G.K.; CHESUNOV, V.M.

Water-soluble condensation resins in latex mixtures. Leg. prom. 18
no.5:22-26 My '58. (MIRA 11:6)

(Latex)

LYUDVIG, P.; MONASTYRSKAYA, M.S.; PAVLOV, S.A.

Reinforcing rubber in latex by combining latex mixtures with
condensation resins. Kauch. i rez. 17 no.3:12-15 Mr '58.
(MIRA 11:6)

1.Moskovskiy tekhnologicheskii institut legkoy promyshlennosti.
(Rubber) (Resins, Synthetic)

SOV/138-59-4-5/26

AUTHORS: Kuznetsov, A.R., Lyudvig, P., Monastyrskaya, M.S., Pavlov, S.A.

TITLE: The Ionic Deposition of Carboxylate Latexes. Communication 2: Increasing the Thermal Stability of Films Prepared from Carboxylate latexes (K voprosu ob otlozhenii karboksilatnykh lateksov. Soobshcheniye 2. Povysheniye termostoykosti plenok, poluchayemykh iz karboksilatnykh lateksov)

PERIODICAL: Kauchuk i Rezina, 1959, Nr 4, pp 17-19 (USSR)

ABSTRACT: The first part was published in "Kauchuk i Rezina", 1959, Nr 1. Experiments were carried out on increasing the thermal stability of carboxyl groups containing latex films by ionic deposition. The following factors were determined for films made from SKS-5-30 latex: dependence of the tensile strength on the time of vulcanisation, relaxation curves and equilibrium moduli at 100% elongation (Figures 1 and 2). The vulcanisation temperature was 100°C, pH 6.7, 20% magnesium chloride was used as a vulcanisation agent. Experiments showed that the tensile strength increased on raising the vulcanisation temperature. Films made of latex SKS-5-30 with polymethyl acrylate were also tested as the introduction of polyacrylates increases the adhesion of carboxylate latex films to fibres (Figures 3, 4 and 5).

Card 1/2 Optimum strength was obtained when 20% of either polymethyl

SOV/138-59-4-5/26

The Ionic Deposition of Carboxylate Latexes. Communication 2:
Increasing the Thermal Stability of Films Prepared from Carboxylate
Latexes

acrylate or polymethyl methacrylate emulsions were added to the latex. Investigations on the action of calcium ion as coagulating and vulcanising agent showed that calcium chloride can be used for this purpose. Films with the largest degree of thermal stability were obtained by adding melamine-formaldehyde resins to the SKS-5-30 latex and vulcanising the product in the presence of magnesium ions. The reaction mixture was heated for 30 minutes at 100°C and subjected to vulcanisation for one hour at pH of 8.1; 20% magnesium chloride solution was used as a vulcanising agent. Results obtained during these experiments are discussed and given in the form of graphs (Figures 6 and 7). The strength of films was considerably increased when using SKS-5-30 in conjunction with melamine-formaldehyde resins; optimum results were obtained when 20% of the resin was used. The vulcanisates show considerable relative elongation even when 30% of the resin is added to the polymer.

There are 7 figures and 4 Soviet references.

ASSOCIATION: Moskovskiy tekhnologicheskii institut legkoy promyshlen-
Card 2/2 -nosti (Moscow Technological Institute of Light Industry)

PETROV, A.A.; LYUDVIG, V.

Investigation in the field of conjugated systems. Part 57. Condensation of α -vinylpyridine with diene hydrocarbons. Zhur.ob.khim. 25 no.4:739-744 Ap '55. (MLRA 8:7)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета i universitet Fridrikha Shillera v g. Iyena.

(Condensation products (Chemistry)) (Pyridine) (Olefins)

LYUDVIG, Ye.B.; GANTMAKHER, A.R.; MEDVEDEV, S.S.

Certain features of the carbonium polymerization of styrene-
 α -methylstyrene system. Dokl. AN SSSR 119 no.1:90-93 Mr
'58. (MIRA 11:4)

1.Chlen-korrespondent AN SSSR (for Medvedev)
(Styrene) (Polymers and polymerization)

LYUDVIG, Ye.B.; GANTMAKHER, A.R.; MEDVEDEV, S.S.

Characteristics of the mechanism of cationic polymerization.
Part 1: Copolymerization of the systems α -methylstyrene - styrene,
isobutylene - styrene and n-butyl vinyl ether - styrene. Vysokom. soed.
1 no.9:1333-1341 S '59. (MIRA 13:3)

1. Fiziko-khimicheskiy institut im. L.Ya. Karrova
(Styrene) (Ether) (Propene) (Polymerization)

LYUDVIG, Ye. V.; GANTMAKHER, A.R.; MEDVEDEV, S.S.

Characteristics of the mechanism of cationic polymerization. Part 2:
Mechanism of the fundamental reactions of cationic polymerization.
Vysokom. soed. 1 no.9:1342-1350 S '59. (MIRA 13:3)

1.Fiziko-khimicheskiy institut im. L. Ya. Karpova.
(Polymerization) (Styrene) (Propene)

5 (2)

AUTHORS:

Gantmakher, A. R., Medvedev, S. S.,
Academician, Lyudvig, Ye. B.

SO7/20-127-1-26/65

TITLE:

On the Initiation Mechanism of Cationic Polymerization in the Presence of Metal Halides (K voprosu o mekhanizme initsirovaniya kationnoy polimerizatsii v prisutsvii galogenidov metallov)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 1, pp 100 - 103 (USSR)

ABSTRACT:

There are two interpretations concerning the initiation mechanism of carbonium polymerization and of the formation of the primary carbonium ion, respectively: (a) Cationic polymerization cannot proceed in the presence of metal halides without an addition of various co-catalysts. (b) This polymerization is possible under certain conditions without the additions mentioned. The problem of the nature of the co-catalytic additions developed considerably with the progress of investigations. In references 1-3 it was detected for isobutylene polymerization in liquid and in hexane solution that no polymerization takes place without proton-containing additions. Therefore it results that always proton-containing acids of the type $HB \cdot PX_n$ act as

Card 1/4